

March 2021

## The Role of Coach's Gender on Coaching Self-Efficacy for Division III Female Student-Athletes

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### Recommended Citation

Swim, Nicholas M.; Walker, Khirey B.; Turick, Robert; and Judge, Lawrence W. (2021) "The Role of Coach's Gender on Coaching Self-Efficacy for Division III Female Student-Athletes," *Journal of Athlete Development and Experience*: Vol. 3 : Iss. 1 , Article 1.

DOI: <https://doi.org/10.25035/jade.03.01.01>

Available at: <https://scholarworks.bgsu.edu/jade/vol3/iss1/1>

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# JADE

Journal of Athlete  
Development and Experience



**VOLUME 3**  
ISSUE 1



## GLOBAL PARTNERS



# The Role of Coach's Gender on Coaching Self-Efficacy for Division III Female Student-Athletes

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## Abstract

The landscape of women in college sports has improved dramatically since the enactment of Title IX in 1972. Participation rates and funding have increased, providing a more inclusive environment for female student-athletes to compete. However, females ascending to leadership positions within the NCAA has experienced a downward trend. Currently, males hold the majority of athletic director positions and serve as head coaches on more than half of female varsity sport teams. This may be detrimental to female student-athletes, as women in leadership positions provide same-gender role models and mentor relationships for female student-athletes. The purpose of this study is to examine the relationship between coaching gender and perceived self-efficacy of female student-athletes to pursue coaching as a profession, while also investigating the impact of perceived barriers (discrimination and working hours) to entering the field. The sample population, Division III female student-athletes ( $n = 192$ ), regardless of their coach's gender, indicated having high coaching self-efficacy. Additional findings found that coaching self-efficacy had a statically significant relationship with gender ( $p = .48$ ), desire to coach ( $p < .001$ ), and perceived barriers to entry (discrimination,  $p = .007$ ; working hours,  $p < .001$ ). Furthermore, female student-athletes indicated that they had low levels of desire to coach at every level of the NCAA (Division I:  $M = 1.77$ ; Division II:  $M = 1.88$ ; Division III:  $M = 3.64$ ), and only slightly showed a desire to coach in high school sport ( $M = 5.45$ ).

**Keywords:** *Coaching Self-Efficacy, Gender, Intercollegiate Athletics*

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The number of women participating in intercollegiate athletics expanded from 29,977 in 1972 to 218,496 during the 2018-2019 academic year (NCAA, 2019). While the increase in participation rates for female student-athletes has been substantial, women are underrepresented in leadership positions within college athletics. Across all levels of the National Collegiate Athletic Association (NCAA), women hold only 25% of all head coaching positions and 22% of the athletic director positions (NCAA, 2020). The lack of female representation in intercollegiate athletics is troubling because, as Massengale and Lough (2010) acknowledged, women in leadership positions serve as excellent same-gender role models for female student-athletes.

One reason for the low representation of women in leadership positions is after resigning from head coaching positions, they are not replaced by other female coaches (Kamphoff & Gill, 2008).

Additional studies acknowledge women face entrance barriers and exit the coaching profession for many different negative reasons, including gender discrimination (Rhode & Walker, 2008), work-life conflict (Amon, 2015; Machida-Kasuga et al., 2016), lack of role models (Greenwalt, 2012; Lumpkin et al., 2013), and may find themselves without the right network and support system (Katz et al., 2018). The gender discrimination in college athletics is systemic and often times invisible, as the lack of female sport leaders may lead to women not identifying athletics as a viable career path (Whisenant et al., 2005). The work-life conflict, largely seen as a 'women's issue,' can lead to higher rates of stress due to family commitment for females and can have a negative effect on the confidence for female leaders within sport (Bruening & Dixon, 2007; Machida-Kasuga et al., 2016; Schenewark, 2008).

While barriers exist for women in the

coaching profession, many females seek to enter coaching for positive reasons, such as past experiences within their individual sport and playing career (Cunningham & Singer, 2010; Smith, 2012), desire to help female student-athletes reach their full potential (Kamphoff & Gill, 2008; Morris et al., 2014), and to serve as a positive role model for female student-athletes (Massengale & Lough, 2010). Arguably, the most important responsibilities of coaches include the ability to be a positive role model and to foster the growth and success of female student-athletes via mentorship (Bower, 2009). These experiences may even be heightened when female student-athletes have access to same-gender coaches and role models, as they may identify more characteristics with them, which can help foster a positive relationship, leading to the increased growth and development (Fasting et al., 2013; Massengale & Lough, 2010).

The current female student-athlete population most likely represents the future female assistant coaches, head coaches, and athletic administrators (Acosta & Carpenter, 2014). Darvin et al. (2019) documented the path for women pursuing a coaching career within intercollegiate athletics by analyzing the experiences of assistant coaches. Participants acknowledged a desire for educational advancement, sponsorship, and a passion for teaching as three common reasons women choose to begin their coaching careers. Yet, the assistant coaches referenced the lack of coaching ambitions in their personal experience, which could have been detrimental in the pursuit of an intercollegiate athletic coaching position (Darvin et al., 2019). One of the key reasons a lack of coaching aspirations may exist is due to the lack of women in leadership positions within intercollegiate athletic departments (e.g., athletic directors and head coaches) (Acosta & Carpenter, 2014). Acosta & Carpenter (2014) analyzed the reasoning of why women are not serving in leadership roles and identified homologous reproduction as a possible reason. Homologous reproduction occurs when males tend to hire males and females tend to hire female. A

recent study by Darvin and Sagas (2017) confirmed homologous reproduction for assistant coaches in women's college sport, as their findings indicated male coaches hire male assistants at a higher rate than female assistants and vice versa across gender.

Subsequently, researchers have used Social Cognitive Career Theory (SCCT), and specifically self-efficacy, to gain a better understanding of female student-athlete perceptions on entrance to the coaching field (Moran-Miller & Flores, 2011; Smith, 2012). Prior findings have suggested coaching self-efficacy serves as a strong predictor of intentions to enter coaching (Cunningham et al., 2005; Cunningham, & Singer, 2010). Furthermore, female student-athletes with female head coaches reported higher levels of self-efficacy to enter coaching compared to teams coached by male head coaches (Everhart & Chelladurai, 1998). Coaching self-efficacy is defined as "one's confidence in his or her capacity to perform coaching tasks effectively" (Everhart & Chelladurai, 1998, p. 191). Previous studies of coaching self-efficacy specifically examined Division I student-athletes or grouped members of various classifications (Everhart & Chelladurai, 1998; Moran-Miller & Flores, 2011). Yet, little to no research within the field has solely focused on the experiences of Division III female student-athletes. With 81,955 female student athletes currently competing at the Division III level, more than one-third (37.3%) of the NCAA's total female student-athlete population, the perspective of the Division III student-athlete must be explored (NCAA, 2020).

The Division III athletic model differs drastically from the Division I and II models. For example, Division III athletics has shorter practice sessions, fewer out-of-season games and matches, and more in-region competitions (NCAA, n.d.). Moreover, the selection process for student-athletes between divisions differ significantly as well. While Division I and II student-athletes may receive scholarship funding for their sport participation, Division III student-athletes do not receive financial aid for

their sport participation (Segura III & Willner, 2019). This process forces coaches in Division III athletics to sell other important attributes of their institutions, including academics, on-campus clubs, and recreational opportunities (Segura III & Willner, 2019). This emphasis on a holistic college experience permits Division III female student-athletes to have heightened student identities and become more involved in their academic majors which, consequently, may cause them to not view coaching as a viable option for their career (Sturm et al., 2011). Therefore, the mentoring, development, and inclusion of more female coaches may provide a possibility to enhance the overall experience of the Division III female student-athlete. Thus, understanding the perceptions of the Division III female student-athlete on coaching self-efficacy is vital in helping to enhance the number of women within the coaching pipeline. While studying Division I and II athletic populations remains important, additional isolated, in-depth investigations into the experience of Division III athletics is necessary.

To that end, the purpose of this study is to examine the relationship between a head coaches' gender and perceived coaching self-efficacy of Division III female student-athletes. Additionally, this study will seek to gain perceptions of the desire to coach and potential barriers to entering the coaching profession for Division III female student-athletes. Subsequently, perceived discrimination and working hours will be examined to determine if potential barriers exist and how these barriers associate with female student-athletes' coaching self-efficacy and their desire to coach (Everhart & Chelladurai, 1998; Moran-Miller & Flores, 2011). Currently, there are a large number of female student-athletes being coached by male head coaches, which could alter the experience and development of the next generation of female head coaches.

## Literature Review

Since the enactment of Title IX in 1972, there has been a dramatic increase in female athletic participation. However, women in leadership roles within female athletics still are lacking at all levels (Acosta & Carpenter, 2014). In recent years, researchers actively developed various theories regarding why the participation for female athletics is rising, but the presence of women in leadership positions remains on a downward trend. Sagas and Cunningham (2004) acknowledged that women are not properly represented in sport leadership positions considering the high numbers of sport participation and the dwindling number of women within upper level sport administration positions. As a result of the lack of female sport administrators, potential female coaches and athletic staff face many barriers to enter the sport industry, including the lack of proper guidance and mentorship (Kamphoff, 2010). As Acosta and Carpenter (2012) acknowledged, "most female coaches come from the ranks of past athletes" (p. 27), therefore understanding female student-athlete experiences with collegiate coaches and their potential intentions to enter the coaching profession is critical.

## Female Underrepresentation in the NCAA

The under-representation of females in the coaching ranks exhibits a lack of role models and mentoring relationships in the NCAA for female student-athletes (Everhart & Chelladurai, 1998). In the NCAA, women hold 40.85% of coaching jobs in female sports, while female participation rates are at an all-time high (NCAA, 2019). The lack of female head coaching role models is vital to examine, especially when assessing the ability of a coach to motivate young women to set and achieve goals toward a potential coaching career (Morgenroth et al., 2015). Mentoring shares many of the same characteristics of coaching and can separate average coaches from effective coaches.



The aforementioned characteristics include advising, facilitating, guiding, motivating, and role modeling (Lough, 2001). Mentoring relationships tend to be established when a younger individual identifies a positive role model in their life. In intercollegiate athletics, role models for student-athletes usually are members of the coaching staff, and these role models can create mentorship relationships when a positive player-coach relationship is created (Weaver & Chelladurai, 1999). Prior research recognized that the establishment of a player-coach relationship tends to be a positive experience for female student-athletes, specifically when a female coach is involved (Gordon et al., 1998).

While female sport participation is more commonplace on college campuses, the number of female athletic administrators remains limited. In 2018, the gender representation of athletic directors in the NCAA was reported as: Division I: 89.5% male and 10.5% female; Division II: 81.7% male and 18.3% female; and Division III: 68.9% male and 31.1% female (Lapchick & Baker, 2018). Across all three divisions, females represent only 21.2% of athletic director positions, demonstrating that females hold significantly less athletic director positions than their male counterparts (Lapchick & Baker, 2018). Previous research also suggested the lack of female athletic administrators could directly link to the lack of female coaches within sport (Bower & Hums, 2013). As Bower & Hums (2013) revealed 44% of female athletic administrators were former head coaches at the collegiate level. With the under-representation of female leadership spanning from head coaches to athletic administrators, female student-athletes are losing opportunities to build valuable relationships with female leaders within the sport industry (Hancock & Hums, 2016; Massengale & Lough, 2010).

Additionally, under-representation of women in the NCAA could be attributed to hiring similarities, which is classified as the practice of hiring someone with similar characteristics to the individual doing the

hiring (Darvin & Sagas, 2017; Kilty, 2006; Stengl & Kane, 1991). Stengl and Kane (1991) found females are hired at a greater rate by female administrators compared to their male counterparts. Kilty (2006) found similar results and identified the gender of an athletic director has a direct impact on the amount of female head coaches on staff at that institution. These hiring similarities also are prevalent with gender of head coach and gender of their assistant coaches, as Darvin and Sagas (2017) found that male coaches of female sport teams hired male assistants at a higher rate than female assistants. Across all divisions in the NCAA, trends of gender bias are frequent when making hiring decisions (Kilty, 2006). Acosta and Carpenter (2014) found that in Division I, when there is a female athletic director, the percentage of female head coaches is 46.8% compared to 43% when the athletic director is male. In Division II, the average percentage of female head coaches is 40.6% when there is a female athletic director compared to 35.9% with a male athletic director. While in Division III, female head coaches average 53.9% with a female athletic director, compared to 44.4% with a male assuming the position. Across all divisions in the NCAA, males hire more male head coaches and females hire more female head coaches, giving confirmation that hiring similarities exists (Acosta & Carpenter, 2014).

The under-representation of women in leadership roles was further analyzed by Yiamouyiannis and Osborne (2012), who collected data on the governance structures within the NCAA for Division I, II, and III and examined issues in gender representation and gender equality programs. The findings revealed representation inequalities within all levels of governance in the NCAA, including various barriers to enter the field, leading to the lack of females at all levels. The under-representation of women could be reflective of the perceived differences in leadership qualities of males and females (Yiamouyiannis & Osborne, 2012). Sabo et al. (2016) found comparable results for female head

coaches and suggested it was easier for men to attain upper level positions in coaching. Yiamouyiannis and Osborne (2012) stated “it may be easier for women to access leadership positions and gain experience at Division III, but few individuals are able to advance from Division III to the positions of power within Division I” (p. 10).

In addition to the prominence of women within upper level sport administrator and head coach roles, the growth of women as assistant coaches is important to acknowledge as well. Female assistant coaches are seeing an increase in population throughout all Divisions in the NCAA (Acosta & Carpenter, 2014). In 2014, there was a total of 13,222 paid assistant coaches for women’s teams, 7,503 of whom are females (57.1%), which represents the largest group of women employed in NCAA (Madsen et al., 2017). Assistant coaching positions are seen as a steppingstone for a head coaching position, thus, there is value for females to possess these opportunities early in their careers (Sagas & Cunningham, 2004). Furthermore, assistant coaches play a pivotal role in the development of student-athletes, “when the assistant is a female, the athletes have another female role model from which to learn” (Acosta & Carpenter 2014, p. 27). The recent growth of female assistant coaches is promising for the continued growth of female athletics and the overall female student-athlete experience (Madsen et al., 2017).

To better understand current and past trends in intercollegiate athletics on females in leadership positions in athletics (e.g., assistant coaches, head coaches, and athletic directors), Lapchick and Baker (2018) created an instrument to grade institutions, conferences, and NCAA on gender representation. Overall, grades were generated based on the societal norm that women should at least hold 50% of the jobs in the profession. The grades were as follows: athletic directors of Division III schools earned an F (31.1%), female head coaches of Division III women athletic teams earned a C (44.3%), and assistant coaches of

Division III women athletic teams earned a B (52.4%; Lapchick & Baker, 2018).

To further investigate the gender equity in college athletics, LaVoi and Silva-Breen (2017) generated a comprehensive report of Division III athletics, utilizing the Tucker Center’s report that grades female head coaches’ representation among all female sports. In regard to conferences within Division III athletics, the grades were as follows (conference total in parenthesis): A (0), B (5), C (24), D (14), and F (0). The individual sports grades are: A (field hockey and lacrosse), B (softball, volleyball, and basketball), C (ice hockey and soccer), D (tennis, diving/swimming, and alpine/nordic skiing), F (cross country and track). Sports that received lower female head coaching grades could be directly related to coaches taking on both the men’s and women’s program (LaVoi & Silva-Breen, 2017).

Previous research recognized the high likelihood of coaches coaching student-athletes of the same gender, yet as highlighted above, there are examples of coaches coaching student-athletes of the opposite gender (Bruening et al., 2016). One of the prominent areas of concern for coaches that coach student-athletes of the opposite gender is the ability to serve as a mentor on and off the respective playing field (Everhart & Chelladurai, 1998). The relationship of mentoring for coaches and athletes has a four-step process: 1) trusted relationship between parties; 2) interest of coach in personal development of athlete; 3) coach purposefully gives athlete his/her time to help fulfill athlete needs; 4) athlete’s imitation of coaching behavior takes place (Gordon et al., 1998). In some cases, the development of a mentoring relationship serves as a positive influence on the career attainment of female student-athletes (Bower, 2009). Yet, previous research acknowledged that career attainment can be better predicted through the use of Social Cognitive Career Theory (SCCT; Cunningham & Singer, 2010).

## Social Cognitive Career Theory

The foundation of SCCT was established through combining Social Learning Theory (SLT) and Social Cognitive Theory (SCT). The development of the SLT was first proposed by Bandura (1963) to aid in his investigations of how individuals learn and react to different environments. SLT was the first learning theory to bridge the gap between behaviorist and cognitive learning theories because it covers attention, memory, and motivation (Bandura, 1969). Bandura (1963) found people learn through the observation of their own environment, and these observations include an individuals' behavior, attitudes, and perceived outcomes of behaviors. Building from SLT, Bandura (1986) introduced SCT, which further developed the human interaction aspect of the theory with an emphasis on how personal factors, environmental influences, and behaviors influence each other to predict behavioral change for an individual.

Utilizing the framework of SCT, Lent et al. (1994) conceptualized SCCT to help predict individuals' perceived ability to attain a position and how they see themselves performing the position (Lent et al., 1994). Through examining, predicting, and understanding an individual's behaviors, the SCCT framework can help establish how career development has been molded for an individual over time. SCCT focuses on three key constructs: self-efficacy (i.e., judgment of capabilities), outcome expectations (i.e., beliefs about outcomes of various actions), and choice goals (i.e., intentions to pursue behavior) (Lent et al., 2008). The self-efficacy construct initially was adopted by SCT and predicts one's perceived ability to perform tasks associated with a professional field. Furthermore, it allows an individual to demonstrate personal confidence and control over motivation, behavior, and their social environment (Bandura, 1986).

The SCCT framework has been applied to many studies focusing on attaining positions in sport, most notably leadership positions within the NCAA

(Cunningham et al., 2005; Cunningham, Doherty, & Gregg, 2007; Everhart & Chelladurai, 1998; Moran-Miller & Flores, 2011; Wicker, 2008). Cunningham et al. (2007) applied SCCT to examine the relationship between assistant coaches of female sport teams and their intentions to become head coaches. Their findings indicated coaching self-efficacy and outcome expectations were higher in male assistant coaches compared to female assistant coaches in regard to attaining a head coaching position. However, SCCT was found to be an accurate predictor of self-efficacy in attaining a career for females in athletics.

The SCCT framework primarily focuses on career attainment and is defined as one's perceived ability to perform tasks associated with an identified career (Lent et al., 1994). Individuals enter coaching to make a positive impression on the life of young athletes, including the ability to educate through sport participation (Fasting et al., 2013). For females, the pursuit to enter coaching is heightened with past playing experiences, competition at a high level of sport, and/or high levels of self-confidence in teaching the sport (Smith, 2012). With the heightened opportunities in sport for female student-athletes but not coaches in the field, gaining a better understanding of why female coaches enter the profession may provide insight into the lack of intercollegiate female head coaches.

## Women as Leaders in College Sport

Pastore (1991) distinguished the reasons for why females enter the coaching profession and how those reasons differed from males. Ultimately, all coaches, regardless of gender, decide to enter the coaching profession in order to stay involved in competitive sport. Kamphoff and Gill (2008) furthered this notion by identifying that female student-athletes most likely would enter the coaching profession to interact with younger female student-athletes and provide a similar positive experience to what they encountered. Their findings



also highlighted how creating relationships and developing the character of future student-athletes were instrumental reasons for pursuing employment in the coaching profession. Smith (2012) investigated female student-athlete perceptions of coaching and why former players would attempt to obtain a career in intercollegiate sport. As a result, in alignment with past research, four themes emerged: experience in sport, familiarity of athletics, social networks in coaching, and positive role models.

The lack of female leaders and role models in sport may lead female student-athletes to perceive leadership positions as being solely for men (Schull, 2014). This further can be explained through examining traditional masculine gender roles, which argue powerful leadership positions are aligned with masculine characteristics (Burton et al., 2009). When these leadership positions in sport are identified to be highly masculine, females may not identify those positions as attainable, especially when so few women attain a position of leadership within the current NCAA structure (Schull, 2014). However, when women do attain coaching and leadership positions within sport, their success can have a positive and lasting impression on female student-athletes (Massengale & Lough, 2010).

However, when females do attain leadership positions, Fasting and Pfister (2000) found female student-athletes held heightened experiences. Furthermore, the findings indicated having a female head coach led to a greater appreciation and respect for their coach, which in turn led to higher self-efficacy for the female student-athletes. Thus, giving argument to Bandek (2012) who found higher self-efficacy for female student-athletes had a positive influence on their perceptions of their head coach's effectiveness. For women, high self-efficacy greatly increases interest and will help shape decisions regarding their career planning and development (Wicker, 2008). While high self-efficacy is important for females entering the field of athletics, prior findings conclude self-efficacy may be increased through positive same-gender role modeling relationships (Massengale & Lough, 2010). These

findings align with results from Everhart and Chelladurai (1998) who analyzed the difference between coaching self-efficacy of female student-athletes and gender of head coach. They discovered female student-athletes with a female head coach reported higher coaching self-efficacy than those with a male head coach.

Following the 1998 study from Everhart and Chelladurai, Moran-Miller and Flores (2011) examined the coaching interest of female student-athletes from NCAA and NAIA institutions that, at that time, were led by female head coaches. Utilizing SCCT, they focused on four key variables to determine if relationships existed: coaching self-efficacy, female role models, working hours, and perceived discrimination. A path analysis determined the quality of female head coaches had the strongest relationship with coaching self-efficacy and desire to coach for the female student-athletes. Additionally, Smith (2012) declared that SCCT has the ability to account for perceived barriers during the career development process, especially in the case of women.

As discussed previously, past research recognizes SCCT as an accurate predictor of self-efficacy in attaining a career, especially in athletics for male and female student-athletes (Cunningham et al., 2007; Everhart & Chelladurai, 1998; Moran-Miller & Flores, 2011). Additionally, researchers have discovered that having a female head coach and heightened coaching self-efficacy led to female student-athletes perceiving less barriers to entering into the coaching field (Everhart & Chelladurai, 1998; Moran-Miller & Flores, 2011). While the SCCT framework frequently has been utilized to investigate the intentions of women to enter or continue a career in sport, the number of women holding head coaching roles and leadership positions in intercollegiate athletics is systematically still low (NCAA, 2020). The minimal number of women in leadership positions may lead to less same-gender role modeling and mentoring experiences for female student-athletes. As a result of fewer mentor experiences and role models, female student-athletes

tend to disassociate themselves with athletics after completing their eligibility.

Thus, this study utilized instruments developed by Everhart and Chelladurai (1998), as well as Moran-Miller and Flores (2011), to review the levels of coaching self-efficacy for female student-athletes. Although the previous study by Moran-Miller and Flores (2011) is similar in context to this one, this study is distinct in two important ways. First, this study solely focuses on Division III female student-athletes, an under-represented group in the sport management field of research. Secondly, this study addresses female student-athletes' coaching self-efficacy in comparison to gender of their head coach, which has not been specifically duplicated since Everhart and Chelladurai's (1998) study two decades ago. Furthermore, since the works of both Everhart and Chelladurai (1998) and Moran-Miller and Flores (2011), much has changed in college athletics, therefore a re-examination of female student-athletes' coaching self-efficacy and perceived potential barriers is warranted.

### Methodology

The purpose of this non-experimental study is to examine the relationship between coaching gender and perceived self-efficacy of female student-athletes to pursue coaching as a profession. Furthermore, this study investigates the Division III female student-athlete's desire to coach and potential barriers to entering the field of coaching. Based on prior SCCT findings and the proposed research questions, the following hypotheses were developed.

**H1.** Division III female student-athletes with female head coaches will report higher coaching self-efficacy than Division III female student-athletes with male head coaches.

**H2.** Division III female student-athletes with female head coaches will report a higher desire to coach than Division III female student-athletes with male head coaches.

**H3a.** Division III female student-athletes with fewer instances of perceived discrimination as a

barrier will report higher coaching self-efficacy.

**H3b.** Division III female student-athletes with fewer instances of perceived working hours as a barrier will report higher coaching self-efficacy.

### Instruments

The scales used for this study are similar to those from Moran-Miller and Flores (2011), whose sample included a similar population of female student-athletes. Whereas Moran-Miller and Flores (2011) analyzed their sample as one merged group (e.g., participants from NCAA Division I, II, III; and NAIA Division I, II, and III), this research examined one regional NCAA Division III female student-athlete sample across a multitude of sports. The instruments used for this study included: demographics, the desire to coach scale, the coaching self-efficacy scale, and the perceived hindrance scale (e.g., working hours and discrimination) (Everhart & Chelladurai, 1998; Moran-Miller & Flores, 2011).

**Demographic Survey.** Based on the similar survey distributed by Moran-Miller and Flores (2011), participants were asked to indicate their age, race, year in school, sport involvement, gender of current head coach, multi-sport coach or single sport coach, gender of past coaches from freshman year of high school and on (e.g., club coaches, high school coaches, and former college coaches), and gender of athletic director. For female student-athletes that participated in multiple-sports (e.g., cross country and track & field), the participants were asked to select their current in-season sport. If a student-athlete transferred schools or a coaching change occurred during their time in college, the gender of the most recent coach was used to keep responses consistent with other participating female student-athletes.

**Desire to Coach Scale.** This one-item scale developed by Moran-Miller and Flores (2011) asked female student-athletes their desire to coach at the intercollegiate level. On a Likert-scale from 0 (no desire) to 10 (high desire), respondents indicated their desire to coach within each division of the NCAA, and also at the high school level. If a participant

indicated a high score for desire to coach scale, they were stating that they held high interest in attaining a coaching position.

#### **Coaching Self-Efficacy Scale.**

Everhart and Chelladurai (1998) developed the coaching self-efficacy scale to determine “one’s confidence in performing coaching tasks effectively” (p. 191). Participants received a Likert-scale questionnaire ranging from 0 (no confidence) to 10 (complete confidence). This 10-item scale contained a variety of questions centered around performing common coaching tasks. If a participant scored a high score on the self-efficacy scale, they would perceive themselves performing the tasks associated with the head coach effectively. This survey was validated by both Everhart and Chelladurai ( $\alpha = .96$ ) and Moran-Miller and Flores ( $\alpha = .91$ ). For this study, the coaching self-efficacy scale was also valid, with an  $\alpha = .92$ .

**Perceived Hindrance Scale.** The perceived hindrance scale was developed by Everhart and Chelladurai (1998) to be a predictor of perceived barriers for females to enter coaching in collegiate athletics. Everhart and Chelladurai (1998) established two subgroups of barriers: working hours (6 items) and perceived discrimination (12 items). Using a Likert-scale, responses range from 0 (would not hinder at all) to 10 (would completely hinder). In total, the 18 questions under the perceived hindrance scale are aligned with barriers of entry into the coaching field. If a participant indicated high scores for this scale, they would perceive high levels of hindrance to entering the coaching field. This survey was validated by both Everhart and Chelladurai (discrimination  $\alpha = .87$ ; working hours  $\alpha = .94$ ) and Moran-Miller and Flores (discrimination  $\alpha = .96$ ; working hours  $\alpha = .92$ ). For this study, the coaching self-efficacy scale was also valid, with discrimination ( $\alpha = .94$ ) and working hours ( $\alpha = .87$ ).

#### **Procedure**

Data collection began with the completion of the Institutional Review Board (IRB) approval process. Next, the researchers contacted athletic directors of Division III NCAA institutions in the Northeast by sending an introductory email providing a brief introduction of the primary researcher and the goal of the current research project. This initial contact email also informed those athletic directors the research team was going to contact the head coaches at their institution to ask for assistance in disseminating the survey. Following this, head coaches were sent a recruitment flyer and link to the survey for their respective female student-athletes. The survey link remained available and open for four weeks and bi-weekly reminders were provided to the coaches. Disclaimers were included in the consent form that all information provided was confidential and no student-athlete’s answers would be shared.

Survey research has the ability to reach larger populations and gives researchers flexibility, low administration cost, and controlled sampling (Evans & Mathur, 2005). In order to administer the surveys, the online platform *Qualtrics* was utilized to receive responses from research participants. The lack of face-to-face interaction with the population allowed for an impersonal drawback; yet to mitigate this problem, the primary researcher sent personalized emails explaining the research and gained familiarity with the athletic directors and head coaches.

#### **Population and Sample**

Similar to Stammers (2016), purposive sampling was determined to be the best method for this study, with the goal of attaining potential participants with specific traits to complete the survey (Creswell, 2009). Therefore, this sample specifically targeted one location the New England region (as defined by the Bureau of Economic Analysis), and the subsequent Division III female

student-athletes within that area. The New England region was selected because it contains 75 Division III colleges and universities. In total, coaches from 34 different schools and 60 separate sport teams agreed to forward surveys along to their female student-athletes. Approximately 1,110 female students received surveys with 332 female student-athletes opting to participate in the study. However, only 192 participants submitted completed usable surveys for statistical analysis, resulting in an 18% response rate. While low, Morton et al. (2012) argued lower response rates do not dictate reliability of data.

Participants in this study were predominantly Caucasian (89%), which is slightly higher than the Caucasian female student-athlete population (79%) that currently competes at the NCAA Division III level (NCAA, 2020). This study identified the 10 most popular Division III sports and examined how the gender of head coaches are represented within each sport by using the Tucker Center Report Card (LaVoi & Silva Breen, 2017; NCAA, 2019). The breakdown of participants based on sport includes: basketball ( $n = 14$ ), cross country ( $n = 17$ ), field hockey ( $n = 32$ ), ice hockey ( $n = 3$ ), lacrosse ( $n = 22$ ), soccer ( $n = 20$ ), softball ( $n = 50$ ), tennis ( $n = 7$ ), track & field ( $n = 14$ ), and volleyball ( $n = 13$ ) (see Table 1). In total, eight conferences were represented by their female student-athletes completing surveys: Commonwealth Coast Conference ( $n = 17$ ), Great Northeast Athletic Conference ( $n = 18$ ), Little East Conference ( $n = 33$ ), Massachusetts State Collegiate Athletic Conference ( $n = 25$ ), New England Collegiate Conference ( $n = 21$ ), New England Small College Athletic Conference ( $n = 48$ ), New England Women's and Men's Athletic Conference ( $n = 9$ ), and the North Atlantic Conference ( $n = 21$ ) (NCAA, n.d.). As far as academic year representation within the study, responses declined as year-in-school increased: Freshman ( $n=62$ ), Sophomore ( $n=54$ ), Junior ( $n=31$ ), Senior ( $n=43$ ), and Graduate student ( $n=2$ ).

Table 1

*Demographics of Student-Athlete Participants*

Characteristic	n	%
<b>Classification</b>		
Freshman	62	32.29
Sophomore	54	28.13
Junior	31	16.15
Senior	43	22.40
Graduate Student	2	1.04
<b>Age</b>		
18	45	23.44
19	51	26.56
20	43	22.40
21	31	16.15
22	20	10.41
23	2	1.04
<b>Race</b>		
Caucasian	45	89.59
Hispanic/Latino	51	2.60
Asian/Pacific Islander	43	1.04
Other	31	2.08
Multi-Racial	7	3.64
<b>Sport Represented</b>		
Softball	50	26.04
Field Hockey	32	16.67
Lacrosse	22	11.46
Soccer	20	10.42
Cross Country	17	8.85
Track & Field	14	7.30
Basketball	14	7.30
Volleyball	13	6.77
Tennis	7	3.64
Ice Hockey	3	1.56

*Note. N = 192; Each characteristic section sums to 192.*



Table 2

*Gender of Participant Head Coaches and Athletic Directors*

Gender	Head Coach	%	Athletic Director	%
Male	61	31.77	109	56.77
Female	131	68.23	83	43.23

### Results and Discussion

To ensure consistency, we checked for outliers in the data set or missing values and found no such cases. Therefore, to answer RQ1, an independent t-test was run to examine how a head coach's gender (independent variable; IV) associates with coaching self-efficacy scores (dependent variable; DV). To test RQ2, a similar independent t-test was run. The t-test examined association with the head coach's gender (IV) on desire to coach scores (DV). Lastly, to answer RQ3, two one-way ANOVA tests were run with perceived hindrance (IV) and coaching self-efficacy (DV).

### Coaching Self-Efficacy

The first research question (RQ1) sought to determine if Division III female student-athletes' self-efficacy to enter coaching differed based on the gender of their head coach. Overall, the female student-athletes had high-levels of coaching self-efficacy ( $M = 7.41$ ;  $SD = 1.42$ ). The results of the t-test revealed that there is a statistically significant difference in coaching self-efficacy and gender of head coach  $F(1, 190) = 4.28$ ,  $p = .04$ ,  $r = -.15$ . However, the participants with female head coaches ( $M = 7.56$ ,  $SD = 1.31$ ) only held a slightly higher mean score compared to those with male head coaches ( $M = 7.10$ ,  $SD = 1.61$ ). Based on the statistically significant finding, H1 was supported, demonstrating gender of head coach is a predictor in female student-athletes' coaching self-efficacy.

Table 3

*Descriptive Statistics of Coaching Self-Efficacy Scores by Head Coach Gender*

Gender	<i>N</i>	<i>M</i>	<i>SD</i>
Male	61	7.10	1.61
Female	131	7.55	1.31

*Notes. N = 192 and the mean Coaching Self-Efficacy score (M) was 7.41.*

This result is congruent to past findings. As Everhart and Chelladurai (1998) stated, "there is the suggestion that the coach's gender does influence women's perceptions of the coaching occupation" (p. 195). Furthermore, the inclusion of same-gender leadership may lead to mentorship and role model opportunities for female student-athletes, which could increase their career attainment and career identity (Bower, 2009; Lough, 2001). The recent work by Darvin and Sagas (2017) on homologous reproduction found female student-athletes tend to identify with the head coach role when more females are in leadership positions. Female leadership success can have a positive association on female student-athletes, primarily through mentorship and access to more opportunities originally provided only for males (Massengale & Lough, 2010). The results also are similar to Moran-Miller and Flores (2011), which found high coaching self-efficacy for female student-athletes with female head coaches. However, this study did find high coaching self-efficacy across genders of head coaches unlike Everhart and Chelladurai (1998). Our findings showcase that female student-athletes may have similar experiences in regard to coaching confidence with both male and female coaches. This contradicts past research in SCCT models, where females have seen to have more confidence and interest in coaching when there were female head coaches (Bandeck, 2012; Fasting et al., 2013; Turner, 2015). While these results differ from



some past research, there also is positive indication that both genders of head coaches provide positive sport experiences for female student-athletes at the Division III level.

### Desire to Coach

The second research question (RQ2) sought to determine if Division III female student-athletes' desire to coach differed based on the gender of their head coach. The results of the one-way ANOVA test revealed no statistically significant difference in desire to coach scores and gender of head coach;  $F(1, 190) = 1.514, p > .05$ , allowing us to reject hypothesis 2. Overall, the participants reported low desire to coach scores across all levels ( $M = 3.18; SD = 2.51$ ), along with similar results of both female head coaches ( $M = 3.21, SD = 2.54$ ) and male head coaches ( $M = 3.12, SD = 2.48$ ). Despite female student-athletes in this study reporting high coaching self-efficacy, the participants also indicated low desires to coach within all levels of the NCAA [Division I ( $M = 1.77, SD = 2.75$ ); Division II ( $M = 1.88, SD = 2.71$ ); Division III ( $M = 3.64, SD = 3.39$ )], and an average desire to coach at the high school level ( $M = 5.45, SD = 3.48$ ).

Table 4  
*Descriptive Statistics of Desire to Coach Scores by Classifications*

	<i>n</i>	<i>M</i>	<i>SD</i>
Division I	192	1.77	2.75
Division II	192	1.88	2.71
Division III	192	3.64	3.39
High School	192	5.45	3.48

*Notes.* *M* = the mean of Desire to Coach Scores within that classification level.

Further, to test the association between desire to coach scale and coaching self-efficacy scale, a one-way ANOVA test was applied and revealed a statistically significant correlation between the variables  $F(1, 190) = 30.37, p < .05$ , and  $r = .37$ . This correlation supports previous research within the SCCT framework, which acknowledges the coaching self-efficacy scale as an accurate predictor of desire to coach for female student-athletes (Cunningham et al., 2005; Cunningham et al., 2007; Everhart & Chelladurai, 1998; Kamphoff & Gill, 2008; Moran-Miller & Flores, 2011). The results of this study are similar to Moran-Miller & Flores (2011) as their results also found coaching self-efficacy to be associated with interest in coaching. Additionally, previous research recognizes that individuals who hold high levels of self-efficacy early in their careers are more apt to positively identify in that respected field (Lent et al., 2003). Further, Wicker (2008) argued it is influential for females to hold higher self-efficacy in athletics, helping guide them to pursue a profession in the field.

While the finding of female student-athlete coaching self-efficacy being associated with desire to coach is positive, one negative finding from this research lies in the participants' overall low desire to coach scores. These results somewhat mirror Stammers (2016), whose findings indicated NAIA female student-athletes held high desire to coach at the high school level, but not at the higher levels of college sport. One such reasoning for this could be Sturm et al.'s (2011) findings that Division III student-athletes hold heightened student-identity, leading to student-athletes being more involved with their academic majors, therefore, not seeing coaching as a viable or lucrative career. With an increased opportunity for student-athletes at Division III schools to study abroad and attain internships and/or externships, they may have the ability to obtain more career experiences during their undergraduate degree than their peers at Division I and II. Thus, potentially leading to career choices outside of athletics for

Division III student-athletes.

The results from this study also indicated no differences in gender of head coach and desire to coach. This is a contradictory finding with past research suggesting female student-athletes with female head coaches create a stronger mentoring relationship, leading to greater potential to enter the coaching field (Lough, 2001). This also contradicts the findings in Moran-Miller and Flores (2011), who indicated coaching interest was high for female student-athletes with female head coaches. In comparison, the average interest level for this study was only 3.38, whereas Moran-Miller and Flores's (2011) participants held a significantly higher average of 6.35. While their study only focused on female student-athletes with female head coaches, this study indicated no difference from female to male coaches in desire to coach. One reason for the non-significant difference in desire to coach across gender could be the lack of mentoring relationships existing across both genders of head coaches at the Division III level. Within the NCAA Division III model, students experience less time with their respected head coach, which could lead to less emphasis on mentoring relationships. Furthermore, the low desire to coach scores may indicate coaches are not emphasizing the coaching career as a viable and potentially beneficial field for female student-athletes to pursue.

### Discrimination

The third research question (RQ3) aimed to determine if perceived discrimination (barrier) was associated with coaching self-efficacy for Division III female student-athletes. In examining the perceived discrimination scale, female student-athletes reported low scores on perceived discrimination ( $M = 4.34$ ,  $SD = 2.18$ ). To test H3a, the first one-way ANOVA test was run between perceived discrimination and coaching self-efficacy. The results indicated statistical significance between the two variables,  $F(1,190) = 7.30$ ,  $p = .007$ , allowing us to accept H3a and state an association between perceived discrimination and coaching self-efficacy exists.

Table 5

*Descriptive Statistics of All Scales*

Scales	<i>n</i>	<i>M</i>	<i>SD</i>
Desire to Coach	192	3.19	1.61
Coaching Self-Efficacy	192	7.41	1.42
Perceived Hindrance	192	4.40	1.68
Perceived Discrimination	192	4.34	2.18
Working Hours	192	4.45	2.00

*Notes. M = the mean scale score.*

In contrast to Everhart and Chelladurai's (1998) research, which found differences in perceived discrimination based on gender of head coach, this study found no difference between the two variables. In regard to perceived discrimination as a barrier to entrance into the athletic field, Moran-Miller and Flores (2011) found the barrier of perceived gender and coaching self-efficacy as non-significant. This outcome differs from the findings of this study considering coaching self-efficacy and perceived discrimination resulted in a positive, significant association. Thus, when a female student-athlete holds high coaching self-efficacy, they will be less likely to perceive discrimination in athletic coaching. In terms of SCCT, Smith (2012) argued self-efficacy previously has been linked as a primary reason for negating perceived barriers during the career development process for women. Simply, when self-efficacy is high, women overcome existing barriers at a higher rate (Smith, 2012).

Another potential reason for the relationship between perceived discrimination and coaching self-efficacy is the growing visibility of gender equity programs in the NCAA (Acosta & Carpenter, 2014). To this end, Morris et al. (2014) discussed increased hopefulness from female assistant coaches in attaining head coaching positions due to more doors opening for women in sport. This is extremely evident in

the Division III athletics model. Currently, Division III holds the highest rate of females in leadership positions, including head coaches and athletic directors (LaVoi & Silva Breen, 2017; NCAA, 2020). Therefore, female student-athletes may be optimistic this level of sport in the NCAA is an inclusive environment for women sport leaders, lessening their perceived discrimination as a barrier for entrance.

### Working Hours

The perceived hindrance scale also included working hours as a barrier, directly tying to H3b. Similarly, to perceived discrimination, the working hours scale produced semi-low scores ( $M = 4.45$ ,  $SD = 2.00$ ). Furthermore, the results of the one-way ANOVA test revealed statistical significance between working hours and coaching self-efficacy,  $F(1, 190) = 10.70$ ,  $p < .05$ , supporting H3b. However, when testing the association between gender of head coach and the working hours scale, no statistical significance was found. The results of the ANOVA test display that as perceived hindrance of working hours increases, coaching self-efficacy decreases. Similarly, previous studies acknowledge coaching self-efficacy as a significant predictor on perceptions of working hours as a barrier for female student-athletes (Everhart & Chelladurai, 1998; Moran-Miller & Flores, 2011).

Bruening and Dixon (2007) referenced working hours primarily as an issue for women. Additionally, prior research recognized underlying problems within working hours include how it associates with career development for women (Machida-Kasuga et al., 2016), the family commitment stereotype (Lumpkin et al., 2013), and negative circumstances leading women to exiting the profession early (Amon, 2015; Bruening & Dixon, 2007). With the increasingly long working hours of collegiate coaches, working hours is a huge challenge, especially for younger coaches (Lumpkin et al., 2013). The Gender Equity Report (NCAA, 2009) similarly highlighted working hours and low salaries as reasons why females do not enter

coaching. Furthermore, work-life balance can have a greater, negative impression on women advancing in sport than males, due to the heightened sense of family commitments (Machida-Kasuga et al., 2016). However, Everhart and Chelladurai (1998) found similar results to this study, where no difference emerged across gender of student-athletes for the perceptions of working hours.

The association between working hours and desire to coach also was investigated, with findings indicating statistical significance;  $F(1, 190) = 3.56$ ,  $p < .05$ . This demonstrates the female student-athletes' perceptions of working hours is associated with desire to coach. One potential reason for this relationship is that Division III athletics have smaller department budgets, subsequently, creating smaller salaries for coaches (Thys, 2015). Lumpkin et al. (2013) stated coaching salaries at smaller schools do not mandate the time given to the profession. For example, Thys (2015) reported that the average head coach salary for Williams College, a Division III institution in the Northeast, averaged almost \$80,000; however, the average salary of assistant coaches at Williams was just over \$12,500. The disparity between the two amounts is critical because assistant coaching positions usually are the first position attained when pursuing a coaching career.

### Theoretical Implications

The theoretical implications will help advance SCCT, specifically coaching self-efficacy for female student-athletes. This study found validity to coaching self-efficacy as a viable tool to assess confidence and perceptions of female student-athletes to attain a head coaching position. Further, female head coaches provided greater coaching self-efficacy as gender of head coach predicted coaching self-efficacy for female student-athletes at the Division III sport level. However, this study found low desire-to-coach from the female student-athletes, allowing researchers to argue coaching self-efficacy may be an accurate predictor of confidence in ability, but not a

good indicator of intentions to enter sport coaching positions. Next, this study found the highest desire to coach within high school sport. This may be due to the ability for female student-athletes to attain a career aligned with their academic endeavors, while also coaching their respected sport, due to the lower level of commitment to coach at the high school level. Another key finding was coaching self-efficacy predicted perceptions of barriers (e.g., discrimination and working hours) to enter coaching. This highlights the confidence (e.g., self-efficacy) of an individual may help lessen the well documented barriers of entry into college and high school coaching positions. Furthermore, Division III athletics may hold a more inclusive environment for female student-athletes than other divisions, based on their higher rate of female leaders. Lastly, perceptions of working hours were found not to be a barrier to entry for female student-athletes, with researchers arguing the negative perceptions of working hours may develop over time for females in sport.

### **Practical Implications**

This research has many practical implications that can be beneficial to student-athletes, coaches, and administrators. For female student-athletes, they can see the benefits of same-gender role models and mentoring relationships and seek guidance from a female in leadership within their athletic department if their head coach is not female. For coaches, they should begin to discuss coaching options with female student-athletes and provide resources to lead them to potential employment in the field. Lastly, athletic administrators should use this research to help female student-athletes enter the coaching field. This study suggests Division III female student-athletes report high coaching self-efficacy, but low levels of interest to enter coaching as a profession, potentially widening the current gender gap in athletic leadership. Therefore, athletic administrators should actively seek opportunities to discuss athletic leadership positions

with their female student-athletes. Additionally, administrators should consider hiring more female head coaches at their institutions to heighten the sport experiences for their female student-athletes.

### **Future Research**

In light of the current findings from this study, there are several future potential research opportunities. First, interviews with the current population of female student-athletes in Division III should be conducted in order to better understand their perceived disconnect between coaching self-efficacy and intentions to enter the field. These interviews would allow for a deeper understanding of how their coaching self-efficacy (confidence) was formed and molded during their athletic careers. This qualitative approach would address the heightened academic identity in Division III athletics and how it affects female student-athletes' desire to enter the coaching field. Another potential area of further exploration building from this study would be to look at different population groups, such as Division I and II student-athlete populations to see if similar trends would emerge. One last future research opportunity would be to explore the perceptions of barriers to entry into collegiate athletic coaching. This study found low barriers to entry into the field. However, there still lies a less proportionate population of women coaches throughout Division III. Thus, exploring the disconnect of females in the field and perceptions of barriers is warranted.

### **Limitations**

There were several limitations to this study. The first is the location (New England) and sample population (Division III female student-athletes). This gives a good representation of the current perceptions in this one specific region but is not generalizable to the entire population or other NCAA divisions. The second was that head coaches were relied upon to



forward the email and link to their student-athletes. With this, communication about confidentiality of responses and voluntary participation was provided from the primary researcher, yet no knowledge of the coach and athlete communication was provided. The third limitation to this research was the possibility that only female student-athletes with positive coaching relationships completed this survey. Based on the response rate, the population of student-athletes that do not have a positive relationship with a head coach might have been missed in this study. The fourth limitation to this study was identified in the desire to coach scale, where other potential avenues of coaching were not included. Potential coaching opportunities that could have been added were youth sport, travel teams, other collegiate sport organizations, and professional sport. The final limitation is the high percentage of Caucasian participants in this study. Although the percentage of Caucasian study participants is similar to the percentages of female Caucasian student-athletes in the NCAA DI, there still is a need to capture the experiences of other female student-athletes and the opportunities, as well as resources, available to pursue coaching.

### Conclusion

There are some important key takeaways from this study. The first is coaching self-efficacy had a significant relationship with gender of head coach. Further, the female student-athletes in this study perceived themselves handling head coaching roles at a high rate yet did not desire these positions. This discovery is troubling for the development and growth of future female head coaches. If proper mentoring programs are not enhanced for female student-athletes to identify coaching as a potential professional field, the number of female head coaches will continue to drop, as female student-athletes represent one of the highest populations of future women sport leaders. The next key takeaway is

perceived discrimination and working hours have a significant relationship with coaching self-efficacy. This demonstrates high confidence (coaching self-efficacy) for female student-athletes may decrease their negative perceptions of barriers to entering the coaching field and allow for a more inclusive environment.

The aim of this study was to gain perceptions of Division III female student-athletes on coaching. Overall, this study found statistically significant relationships in all but one hypothesis. This research should be utilized by athletic directors and coaches alike to push for more female head coaches in Division III athletics. Currently, female student-athletes do not perceive coaching as a viable option, which calls for change at the institutional level.

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